Listing of Claims:

Claims 1-22 (Canceled)

23 (Currently Amended): An optical device comprising:

a layer of transparent material having a desired curved surface configuration;

a layer including a variable refractive index material made of molecules having a positive or negative dielectric constant anisotropy ~~in accordance with a frequency of an applied AC voltage,~~

wherein the molecules are varied in accordance with the amplitude of an applied AC voltage, and

wherein the AC voltage is applied during a frequency range corresponding to the positive dielectric constant anisotropy or during a frequency range corresponding to the negative dielectric constant anisotropy;

at least two transparent electrodes arranged to sandwich said layer of the transparent material and said layer including the variable refractive index material; and

a driving device for applying the AC voltage substantially equal to or greater than an amplitude of an AC voltage to the at least two transparent electrodes so as to operate the variable refractive index material according to the applied amplitude of the AC voltage,

wherein longer axes of the molecules of the variable refractive index material are aligned along the electric field when applying a larger amplitude of the AC voltage according to the positive dielectric constant anisotropy, and the longer axes of the molecules of the variable refractive index material are aligned perpendicularly to the

electric field when applying a smaller amplitude of the AC voltage according to the negative dielectric constant anisotropy.

24 (Original): An optical device as set forth in claim 23, wherein said voltage from said driving device is an AC voltage having a primary frequency in a range of 1 Hz to 100 Hz.

25 (Original): An optical device as set forth in claim 23, wherein said variable refractive index material is nematic liquid crystal.

26 (Original): An optical device as set forth in claim 23, wherein said at least two transparent electrodes are substantially in parallel.

27 (Original): An optical device as set forth in claim 23, wherein the surface configuration of the transparent material layer on the side of said layer of the variable refractive index material is a convex lens, a concave lens, a fresnel lens, a prism array, a lens array, a lenticular lens or a diffraction grating, or a curved surface formed by a combination thereof.

28 (Original): An optical device as set forth in claim 23, wherein an alignment layer for aligning the liquid crystal in one direction is provided on the surface of said transparent electrode on the side of the layer including the variable refractive index material.

29 (Previously Presented): An optical device comprising a plurality of optical devices

defined in claim 28, wherein each optical device is overlapped in both vertical and horizontal directions so that the directions of orientation of the alignment layers are perpendicular to each other.

30 (Previously Presented): An optical device as set forth in claim 28 or 29, wherein a light is incident from the side of the alignment layer formed under the variable refractive index material so as to match the polarized condition of the incident light with the direction of orientation of the alignment layer.

31 (Original): An optical device as set forth in claim 23, wherein one of said transparent electrodes is replaced with an electrode reflecting at least a part of a light incident to said one of said transparent electrodes.

Claims 32-61 (Canceled)